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GB 2191659 A **EP 1071038 A**
US 6343213 A **US 5655019 A**
US 4549309 A **US 20020008624 A**

(58) Field of Search
UK CL (Edition T) **H4L LABX LACX LADA LADTX**
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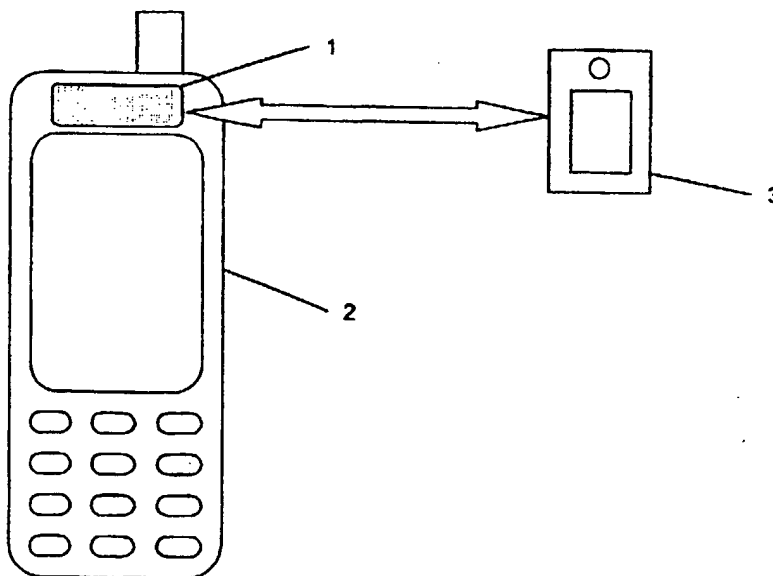
(54) Abstract Title

Transmission prohibition if a terminal is outside a radio tag's range or its checksum does not match that of the tag

(57) A Security Application 1 is installed on all Next Generation mobile Terminals 2 and this communicates with a Next Generation Terminal Security Tag 3 if transmission from the terminal is attempted.

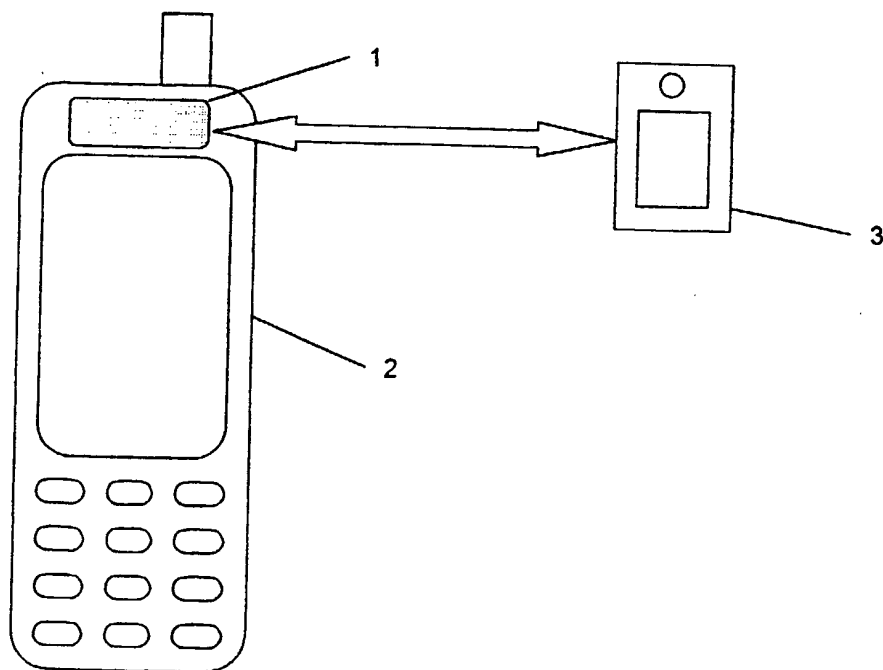
Should the Next Generation mobile Terminal Security Application 1 not receive a valid mathematical checksum from a matching Next Generation Terminal Security Tag 3, then further transmission will be prohibited.

FIGURE 1



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FIGURE 1



Next Generation Terminal Security Application and Tag

This invention relates to a Next Generation Terminal Security Application and Tag to discourage theft of Next Generation mobile Terminals.

Significant numbers of existing mobile phone devices are stolen as their accounts are mostly valid and there are published mechanisms to override personal number codes and subscriber identity modules.

The Next Generation of mobile phones, called Terminals, will be more expensive to purchase and more costly services will be available to subscribers.

Theft of these devices is likely to have a more significant impact on the accounts of Subscribers and could result in sensitive and personal information being accessed.

An object of this invention is the inclusion of a Security Application within the Next Generation of mobile Terminals that communicates with a Radio Tag when transmission from the mobile Terminal is attempted.

Transmission will be prohibited should the mobile Terminal be outside of the Radio Tag's range. The Radio Tag is intended to be mounted on a keyring and ensures that the mobile Terminal will only function if the Subscriber has both the mobile Terminal and corresponding Radio Tag within close proximity.

Should the mobile terminal be stolen its attempted use is then likely to be out of range of the Radio Tag, preventing its operation.

A preferred embodiment of the invention will now be described with reference to the accompanying drawing in which:

FIGURE 1 depicts the security mechanism adopted by the Next Generation Terminal Security Application and Tag.

As shown in Figure 1, a Security Application 1 on the Next Generation mobile Terminal 2 energises a Terminal Security Tag 3 whenever outbound transmission is attempted.

The Security Tag 3 returns a mathematical checksum that corresponds to the security Application 1 within the Next Generation mobile Terminal 2.

Should the security Application not receive the corresponding checksum then further transmission will be prohibited.

CLAIMS

1. A Next Generation Terminal Security Application that is installed within all Next Generation Terminals to discourage theft.
2. A Next Generation Terminal Security Application as claimed in Claim 1 that communicates with a Next Generation Terminal Security Tag.
3. A Next Generation Terminal Security Application and Tag as claimed in Claim 1 and 2, wherein transmission from a Next Generation Terminal will be prohibited should the terminal be outside of the Radio Tag's range.
4. A Next Generation Terminal Security Application and Tag as claimed in Claims 1, 2 and 3, wherein transmission from a Next Generation Terminal will be prohibited should the Terminal Security Application checksum not match that of the Radio Tag.

Amendment to the claims have been filed as follows

CLAIMS

1. A mobile terminal security device that is installed within a mobile terminal and communicates with a corresponding radio tag, wherein operation of the terminal is prohibited if the terminal is outside of the radio tag's range and / or the security application's checksum does not match that of the radio tag.
2. A mobile terminal security device, as claimed in claim 1, wherein the radio tag is mounted on a key ring and ensures the mobile terminal will only function if the subscriber has both the mobile terminal and the corresponding radio tag within close proximity.
3. A mobile terminal security device, as claimed in claim 1, which energises the radio tag whenever operation is attempted.



INVESTOR IN PEOPLE

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Claims searched: 1-4

Examiner: Hannah Sylvester
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Patents Act 1977 Search Report under Section 17

Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

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Other: Online: WPI EPODOC JAPIO

Documents considered to be relevant:

Category	Identity of document and relevant passage	Relevant to claims
X	GB2191659A (PIPERCROSS) see whole document	1-4
A	EP1071038A (ST MICROELECTRONICS)	
A	US2002/0008624 A (LEYDIG VOIT & MEYER)	
X	US6343213B1 (NORTEL) see whole document	1-4
A	US5655019A (McKERNAN)	
X	US4549309A (CORRIGAN) see whole document	1-4

X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art.
Y	Document indicating lack of inventive step if combined with one or more other documents of same category.	P	Document published on or after the declared priority date but before the filing date of this invention.
&	Member of the same patent family	E	Patent document published on or after, but with priority date earlier than, the filing date of this application.